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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/581,235	08/17/2000	Ichiro Kamiya	193390US2PCT	8191

22850 7590 03/07/2002

OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC  
FOURTH FLOOR  
1755 JEFFERSON DAVIS HIGHWAY  
ARLINGTON, VA 22202

EXAMINER

MANOHARAN, VIRGINIA

ART UNIT	PAPER NUMBER
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1764

11

DATE MAILED: 03/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/581,235

Applicant(s)

KAMIYA ET AL.

Examiner

Virginia Manoharan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8. 6) ☐ Other:

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Applicant's election with traverse of Group II, claims 9-22 in Paper No. 10 is acknowledged. The traversal is on the ground(s) that the claims of the present invention would appear to be part of an overlapping search area. That a search and examination of the entire application would not place a serious burden on the Examiner..” . This is not found persuasive because while there are overlapping search area, as argued, however, there are also search areas that are mandatory searches for Group II invention but are not required to be searched for the Group I invention, and vice versa. Class 60 (Power Plant) and class 137 (Fluid handling for control means), for example, are mandatory searches for Group II invention but need not be searched for the Group I invention.

The requirement is still deemed proper and is therefore made FINAL.

This application discloses and claims only subject matter disclosed in prior Application No.09/214,010 , filed June 23, 2000, and names an inventor or inventors named in the prior application. Accordingly, this application may constitute a continuation or division. Should applicant desire to obtain the benefit of the filing date of the prior application, attention is directed to 35 U.S.C. 120 and 37 CFR 1.78.

An application in which the benefits of an earlier application are desired must be copending with the prior application or with an application similarly entitled to the benefit of the filing date of the prior application; and must contain a specific reference to the prior application(s) in the first sentence of the specification (37 CFR 1.78).

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CAR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CAR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CAR 3.73(b).

Claims 9-22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the allowed claims of copending Application No. 09/214,010. Although the conflicting claims are not identical, they are not patentably distinct *apart* from each other because the subject matter of the instant claims are covered in the above copending application and vice versa.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 9-22 are provisionally rejected under the judicially created doctrine of double patenting over the allowed claims of copending Application No. 09/214,010. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common

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subject matter, as follows: a heat exchanger in fluid communication with at least one evaporating can for heat-exchanging and for generating water vapor therefrom; a condenser for cooling the water vapor by subjecting the water vapor and raw water in a raw water tank to heat-exchange thereby obtaining distilled water, a distilled water tank for storing distilled water, vacuum means for evacuating the at least one evaporation can and depressurizing an inside of the at least one evaporating can so as to promote generation of water vapor in the at least one evaporation can, a raw water tank, and raw water supply means for supplying raw water to the at least one evaporation can.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP 804.

Claims 9-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) In claim 9, line 2 and claim 10, line 2 "an evaporation can" should be -- at least one evaporation can"; and claim 13 and claim 16 recitations of "wherein a plurality of evaporation cans" should be -- wherein the at least one evaporation can comprises a plurality of evaporation cans -- so as to avoid e.g., any inconsistency in the claims, i.e., a singular evaporation recitation in

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claim 9 as opposed to the plurality of evaporation cans recited in claim 13. The same is true for claim 22.

B). The apparatus claims e.g. claims 10-22, as recited, are narrative in form and replete with functional or operational language. The structure which goes to make up the device must be clearly and positively specified.

C) The term "cooperating" in claims 9 and 10 should be - connected - or - in fluid communication as the latter is more a recitation of structural connection.

D) In claim 10, line 6 "adapted to" should be deleted as it fails to ascertain whether the condenser do in fact receive the water vapor.

E) In claim 12, in series and parallel is an inconsistent arrangement with the "and/or" recitation.

F) It is unclear in claim 12, what is "used in place of said condenser". Claim 12 also provides for two distinct alternatives with said limitation.

G) There are no proper antecedent basis for support in the claims for the following recitations

1. "... said evacuation can", claim 14, and
2. 'The lower part of said evaporation can' claims 17 and 19.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

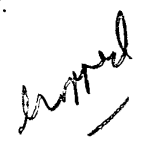
Claims 9-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB '025 in view of anyone of EP '920, Pfenninger '747, Sephton '513 or Shigenaka et al.

GB '025 discloses substantially the features of the apparatus as claimed. The GB '025 reference differs from the claimed invention in that claim 9 for example recites the "... desalination apparatus comprising: a heat exchanger cooperating with an evaporation can can so as to subject low-temperature waste heat and raw water in the evaporation can to heat exchange and generate water vapor in the evaporation can ...".

However, anyone of the above references suggests that the claimed heat exchanger above is a known expediency in the art. See the respective abstracts of each of the secondary references. To combine the references would have been obvious to one of ordinary skill in the art for energy conservation purposes; and inasmuch as all the references belong to the same field of endeavor.

Claims 9-22 are rejected under 35 U.S.C. 103(a) as being obvious over 09/214,010.

The applied reference has a common inventor (e.g. Chivo Kamiya et al with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application of any unclaimed subject matter prior to the effective U.S. filing date of the reference under 37 CFR 1.131.



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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

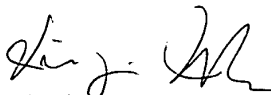
- A. Smith, Jr. discloses a distillation apparatus.
- B. France '941 abstract discloses an evaporation - distillation apparatus using heat lost by a steam turbine.
- C. Tay et al publication discloses vacuum desalination for water purification using waste heat.
- D. Lida discloses a desalting system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Manoharan whose telephone number is (703) 308-3844. The examiner can normally be reached on Tuesday - Friday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Marian Knode, can be reached on (703) 308-4311. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

V. Manoharan/om  
March 5, 2002

  
**VIRGINIA MANOHARAN**  
**PRIMARY EXAMINER**  
**ART UNIT 133/764**  
3/7/02